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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,639	08/14/2001	Kent J. Lanter	PM-30981(1)	9048

22202 7590 07/25/2003

WHYTE HIRSCHBOECK DUDEK S C  
111 EAST WISCONSIN AVENUE  
SUITE 2100  
MILWAUKEE, WI 53202

EXAMINER

BHAT, NINA NMN

ART UNIT	PAPER NUMBER
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1761

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/929,639

Applicant(s)

LANTER ET AL.

Examiner

N. Bhat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

### DETAILED ACTION

1. The abstract of the disclosure is objected to because applicant should provide the abstract in a single paragraph, which has at most 150 words. Correction is required. See MPEP § 608.01(b).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurzinger et al. in combination with Moore.

Kurzinger et al. teach a gelled aquatic fish food which contains 0.001-50% of a gel forming and 0.1-90% of natural feed, additives and water. Specifically, the feed is a liquid feed, which is in a frozen form, or "frost feed" which requires a freezer for storage of the feed. By using a gel former which include cellulose ethers, alkyl or hydroxyalkyl substituted cellulose, methyl cellulose etc. as well as pectins, alginates, gums, agar-agar, gelatin, dextran, the feed can be made into a gel which hold together and do not

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need to be frozen or maintained in the frozen state. The liquid feed which is produced by means of an extruder from one or more natural types of feed and/or commercially available feed mixtures, raw materials and one or more gel formers, as well as vitamins, minerals, colorings, aroma, lure and preservations materials and includes water, the animal feed can be worked up by means of impeller type mixers. The gelled feed is filled in to ready to use jars, cans, bags, tubes or the like or packaged as cylindrically shaped sticks. [Note Column 1, lines 5-25, Column 2, lines 4-67, Column 3, lines 10-28.]

However, Kurzinger et al. does not teach the specifics of the extruder or that there is cooling taking place in the extruder itself. Kurzinger et al. teaches that the gelled aquatic food is formed, cooled and packaged subsequent to mixing all the ingredients.

Moore teaches extruding a starch containing gel confection, which are liquid and then extruded in an extruder which had both heating and cooling zones in the extruder itself. Specifically, from Example 1, high maltose corn syrup and high fructose corn syrup was mixed with a granular cornstarch, the remaining was water. The cornstarch has cold-water solubility and is a chemically unmodified ungelatinized starch. After mixing the ingredients, the mixture was poured into a Bonnet Model 214 Extruder and heated, the extruder had four zones and in the first zone the steam jacket temperature was maintained at 37°C-46°C, in the second and third zones the temperature as raised to 121°C, and in the fourth zone the temperature was reduced to 77°C, the mixture was introduced in to the extruder at ambient conditions 24°C and was discharged as a gelled

rope at about 85°C. [Note Column 6, lines 13-49] Included are means for cutting the rope such as moistened scissors.

It would have been obvious from the combined teachings of Kurzinger et al. in combination with Moore to provide a method of making a firm, flexible animal feed gel which makes a liquid food mixture at temperature which is above ambient conditions which is then passed through an extruder or cooled pipe which includes cooling zones which will gelatinize the gel contained in the liquid food to provide a gelled food product as it exits from the pipe or extruder. Kurzinger et al. as stated above teaches making specifically a gelled animal feed, Kurzinger teaches using an extruder to make cylindrical shaped gelled animal food and that the gelled food is cooled prior to packaging but does not specifically teach where or when this takes place after extrusion and subsequent to packing or during the extrusion process. Kurzinger et al. alone provides motivation to one of ordinary skill in the art to provide a gelled animal food using an extruder. Moore teaches a 4-zone extruder which includes heating and cooling means for gelling a liquid food product a confectionery, which includes a modified cornstarch. To use the extruder such as has been taught by Moore which includes heating and cooling means in preparing the gelled aquatic animal food as taught by Kurzinger et al. would have been obvious because Kurzinger et al. alleges no criticality in the extruder or the apparatus used in making a gelled aquatic animal feed, so to use any extruder or an extruder which includes heating and cooling means or an extruder capable of both heating or cooling is a permissible substitution and thus

renders the invention as a whole obvious to one having ordinary skill in the art at the time the invention was made.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thota et al. teach a process for extruding a gelled product the gel is formed by reaction; there is no cooling in the extruder taking place. EP 0 398 315 teach a method and apparatus for manufacturing a fibrous "neriseihin" product using extrusion. Wagner teaches a screw for an extruding device, which for preparing gelled plastics. Lawrence teaches a sea urchin feed, which is made into a semi-moist stable extruded solid, pellets.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 703-308-3879. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 703-308-3959. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5665.



N. Bhat  
Primary Examiner  
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